

In a subsequent part of his letter, Captain Toynbee makes the following remark :—“ I should like to see the apparent time of the principal stars passing the meridian entered in the *Nautical Almanac*. I am aware this may be found by the difference of their right ascension from that of the sun, but this is not generally known amongst sailors. Besides, the sailor wants, by reference to the table, to find what stars will pass the meridian at such and such a time, but he may have to subtract the sun’s right ascension from many stars before he finds the right one.”

The planet discovered by Mr. Hind on the 22d of July has been called *Urania*, at the suggestion of Professor De Morgan, who had been invited by Mr. Bishop to select a name for the stranger.

Elements of Urania. By Dr. Oudemans.

Epoch, July 22^o, M. T. Greenwich.

M		298 ^o 13' 17"4	
π		26 42 59'3	} Mean Equinox, 1854, Jan. 1
$\oslash$		307 57 51'15	
i		1 56 41'7	
ϕ		8 54 39'2	log e 9'190046
μ		979'715	log a 0'372604

Observations employed in calculating the foregoing elements:—

	Greenwich M.T.	App. R.A.	App. Decl.
	^h ^m ^s	^o ' "	^o ' "
July 22	12 56 21	317 27 14'1	−16 20 40'6
	Leyden M.T.		
Aug. 12	10 47 19	312 20 31'5	−17 21 46'5
Sept. 5	9 23 33	307 46 54'7	−18 6 12'3

The first observation is the mean of three positions taken by Mr. Hind on the night of the discovery of the planet. All the corrections are taken into account. The system of elements is considered by Dr. Oudemans to be very uncertain, since the planet, during the interval comprised between the 22d of July and the 5th of September, had described nearly a great circle.

Discovery of a New Comet (Comet IV. 1854). By M. Bruhns.

On the evening of the 12th of September, a new comet was discovered by M. Bruhns, at the Observatory of Berlin, between

the constellations *Draco* and *Camelopardalus*. About $7^h 45^m$ there was visible in the comet-searcher a very faint nebula, which, when observed with the refractor, exhibited a diameter of several minutes, and by its proper motion was speedily recognised to be a comet. By four comparisons with one of Argelander's stars, M. Bruhns obtained the following position:—

	Berlin M.T.	R.A.	Decl.
	^h ^m ^s	[°] ['] ^{''}	[°] ['] ^{''}
Sept. 12	9 34 48.5	118 38 28.6	+75 5 17.6

The daily motion is,

In R.A. about $+5\frac{1}{2}^{\circ}$ In Decl. about $-30'$

Elements of Comet IV. 1854. By M. Bruhns.

T	1854, Oct. 27.0722	Berlin M.T.	
π	93 21 21.2	} Mean Equinox 1855.0	
Ω	324 43 15.6		
i	40 57 34.7		
Log q	9.906626		
Motion direct.			

These elements are calculated from the following observations:—

	Berlin M.T.	App. R.A.	App. Decl.
	^h ^m ^s	[°] ['] ^{''}	[°] ['] ^{''}
Sept. 12	9 34 48.5	118 50 28.6	+75 5 17.6
15	10 1 5.3	134 1 38.1	+72 57 40.9
18	8 43 18.9	145 5 39.6	70 5 12.0

The mean observation will be represented thus:—

In Longitude,	Theo.—Obs.	$+7.3''$
Latitude,	—	$-3.8'$

Observations of Comet IV. 1854, taken at Mr. Bishop's Observatory.

	Gr. M.T.	R.A.	Decl.
	^h ^m ^s	^h ^m ^s	[°] ['] ^{''}
1854. Sept. 20	8 22 4	10 3 37.14	+67 49 50.9
21	7 50 25	13 18.51	66 41 6.8
24	12 42 44	10 38 59.71	+62 46 52.3